Access DB# 3902/ m&f

SEARCH REQUEST FORM

Scientific and Technical Information Center

Requester's Full Name:	Hm	Examiner #: 78222 Date: $\frac{3}{30/01}$
Art Unit: /// Phone]	Number 30 <u>5 - 100</u> 2	Serial Number: 09/666/46
Mail Box and Bldg/Room Location L> 2B/9 CM/	n:Re	sults Format Preferred (circle) PAPER DISK E-MAIL
If more than one search is subm		ize searches in order of need.
include the elected species or structures, I	ceywords, synonyms, acro that may have a special n	e as specifically as possible the subject matter to be searched. onyms, and registry numbers, and combine with the concept or neaning. Give examples or relevant citations, authors, etc, if ad abstract.
Title of Invention: Mothod for t	he therapoutic h	relyingen Landonietrice Freligeration
Inventors (please provide full names):	Hilde Rullmullo	y-Wingen Landonietrick 495510; charmic
Thursen Engel Rigardo Felbe	Mum Klaus	Diedrich Wolfgang Kupker
Earliest Priority Filing Date:	9/23/1999	1000
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appropriate serial number.		
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		Point of Contact: Susan Hanley Technical Info. Specialist CM1 12C14 Tel: 305-4053
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STAFF USE ONLY	*******	***********
Searcher: Hand feat	Type of Search NA Sequence (#)	Vendors and cost where applicable STN
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Date Completed:	Litigation	Lexis/Nexis
Searcher Prep & Review Time:	Fulltext	Sequence Systems
Clerical Prep Time:	Patent Family	

PTO-1590 (1-2000)

Online Time:

in women)

ANSWER 1 OF 2: HCAPLUS COPYRIGHT 2001 ACS 1996:128826 HCAPLUS 124:250979 124:2509/9
Established hormonal chemoprevention of endometrial and ovarian cancer, and prospects for hormonal chemoprevention of breast cancer pike, M. C.; Spicer, D. V. School Medicine, University Southern California, Los Angeles, CA, USA Contrib. Oncol. (1995), 50(Hormone-Dependent Tumors), 299-323 CODEN: COONEV; ISSN: 0250-3220 Journal; General Review English DΤ English
A review, with 70 refs., on the development of a combination-type oral contraceptive based on a LH-RH agonist with add-back very low dose sex steroids that would protect women against endometrial, ovarian and breast cancers.

9034-40-6, LHRH
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (agonists; LH-RH agonist based oral contraceptive for prevention of breast and endometrial and ovarian cancers in women) English

- ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2001 ACS 1990:491542 HCAPLUS L38 DN 113:91542 Intermittent GnRH antagonist plus progestin contraception conserving tonic ovarian estrogen secretion and reducing progestin contraception conserving to ovarian estrogen secretion and reducing progestin exposure Danforth, Douglas R.; Williams, Robert F.; Hsiu, Jeng G.; Roh, Sung I.; Hahn, DoWon; McGuire, John L.; Hodgen, Gary D. Jones Inst. Reprod. Med., East. Virginia Med. Sch., Norfolk, VA, 23510, ΑU CS USA Contraception (1990), 41(6), 623-31 CODEN: CCPTAY; ISSN: 0010-7824 Journal SO DT English LA The effectiveness of a once-weekly regimen of LH-RH antagonist followed by AB
 - English
 The effectiveness of a once-weekly regimen of LH-RH antagonist followed by a progestin as a potential new contraceptive method was studied in monkeys. On menstrual cycle days 2, 9, 16, and 23 (onset of menses = day 1) monkeys were divided into 2 groups: those injected s.c. with 0.1 mg/kg Nal-Glu LH-RH antagonist in saline and those given only vehicle (control). On cycle days 15-26, each treated female was administered 25 .mu.g norgestimate/day orally. This was continued for 3 treatment cycles (84 days). Weekly injections of Nal-Glu LH-RH antagonist effectively blocked completion of folliculogenesis, ovulation, and corpus luteum function as judged by serum LH, estradiol, and progesterone. Serum progesterone was undetectable (0.01 ng/mL) during the treatment cycles. Importantly, serum estradiol levels during LH-RH antagonist plus norgestimate treatments were maintained at 35 pg/mL. Upon the cessation of norgestimate treatment on day 26 in each cycle, menses uniformly began within 2 or 3 days.

 Regarding recovery, apparently normal and presumably ovulatory menstrual cycles, as judged by timely estradiol elevations, midcycle LH surges, and luteal phase progesterone patterns, were manifest immediately following termination of the final LH-RH antagonist plus norgestimate treatment cycle. Endometrial biopsies removed on day 26 of control cycles and on day 26 of the third treatment cycle revealed appropriate late secretory phase endometrium having tortuous endometrial glands and superficial stromal edema. Histol. sections of ovaries removed at the end of the LH-RH antagonist plus norgestimate treatment revealed multiple small and medium-sized developing and atretic follicles, having maintained serial ablation of the potentially maturing follicles. Apparently, once-weekly LH-RH antagonist plus norgestimate treatment is a feasible method of ovulation inhibition. The intermittent (weekly) LH-RH antagonist regimen allows follicular estradiol prodn. to continue at tonic levels. Transformation of secretory to prolife
- (antagonists, contraceptive activity of progestin and intermittent administration of)

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ANN 1997:364766 HCAPLUS' COPYRIGHT 2001 ACS
AN 1997:364766 HCAPLUS'

N 127:45030

TI A hormonal contraceptive approach to reducing breast and ovarian cancer risk: an update

AU Pike, M. C.; Daniels, J. R.; Spicer, D. V.

CS Departments of Preventive Medicine and Medicine, USC/Norris Comprehensive Cancer Center, Los Angeles, CA, 90033-0800, USA

SO Endocr.-Relat. Cancer (1997), 4(1), 125-133

CODEN: ERCAE9; ISSN: 1351-0088

Dournal of Endocrinology

DT Journal; General Review

LA English

AB A review with 20 refs. Epidemiol. studies have consistently found that bilateral oophorectomy at a young age substantially reduces breast cancer risk. Such surgical menopause around age 35 has been found to reduce risk by 60 to 75%. A reversible medical oophorectomy using an agent such as a gonadotropin-releasing hormone agonist (GnRHa) should achieve a similar redn. in risk. Although the use of GnRHa alone is unacceptable because of the assocd. hypoestrogenic side-effects, these can be satisfactorily prevented by add-back low-dose estrogen treatment with intermittent progestin to protect the endometrium. It is estd. that a regimen of GnRHa plus add-back ultra low-dose estrogen and progestin would prevent some two-thirds of current breast cancer if used from age 30. If used from age 20 almost nine out of ten current breast cancer cases would be avoided. If, as is likely, these ests. also apply to women at high genetic risk of breast cancer risk would be reduced to below that of "normal" women. The protective effects on ovarian cancer are calcd. to be greater than the protective effects on breast cancer. Practical chemoprevention of breast and ovarian cancer using this approach should be possible within 5 yr.

IT 9034-40-6, LH-RH

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(a hormonal contraceptive approach to reducing breast and ovarian cancer risk)
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ANSWER 2 OF 7 HCAPLUS COPYRIGHT 2001 ACS 1997:168540 HCAPLUS
L39
ΔN
DN
                126:152828
                LTV.132020

LHRH antagonist synthetic peptide analogs for use as cancer inhibitors, contraceptives, or other pharmaceuticals Roeske, Roger W.

Indiana University Foundation, USA; Roeske, Roger W.
PCT Int. Appl., 52 pp.
TI
IN
PΑ
SO
                CODEN: PIXXD2
Patent
DT
                English
FAN.CNT 1
                PATENT NO.
                                                                         KIND DATE
                                                                                                                                                APPLICATION NO. DATE
                                                                                             19961219
PΙ
                WO 9640757
                                                                          A2
                                                                                                                                                wo 1996-US9852
                                                                                                                                                                                                       19960607
                WO 9640757
                                                                                             19970220
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                WO 9640757
W: AU, CA, JP, US
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
US 5843901
A 19981201
US 1995-480494
19950607
CA 2210460
AA 19961219
CA 1996-2219460
19960607
                AU 9661680
AU 715399
                                                                                                                                               AU 1996-61680
               EP 794961 A2 19970917 EP 1996-919311 19960607
R: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE

JP 11507374 T2 19990629
                                                                            A1
                                                                                             19961230
                                                                                                                                                                                                         19960607
PRAI US 1995-480494
WO 1996-US9852
                                                                        19950607
              WO 1996-US9852 19960607
MARPAT 126:152828
Many novel LH-releasing hormone(LHRH) antagonist peptide analogs or peptide mimetics, pharmaceutical compns. thereof, and methods of use thereof, are disclosed. The LHRH antagonist comprises a peptide compd., wherein a residue of the peptide compd. corresponding to the amino acid at position 6 of natural mammalian LHRH comprises a hydrophilic N-acyl moiety, a dipolar moiety, a sulfonium moiety, a receptor-modifying moiety or a small polar moiety. LHRH antagonist peptides are useful as inhibitors of sex hormone-dependent cancers (e.g., prostate cancer). LHRH antagonist peptides are also useful as contraceptive agents. The peptides can be used to treat other LHRH-related disorders as well, such as precocious puberty or premenstrual syndrome. The anti-ovulatory and histamine release activity of LHRH antagonists are compared. S.c. injections of LHRH antagonists suppressed plasma testosterone levels.
                                                                         19960607
os
AΒ
               1njections of LHRH antagonists suppressed plasma testosterone levels.
9034-40-6DP, LHRH, analogs
RL: BAC (Biological activity or effector, except adverse); PRP
(Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL
(Biological study); PREP (Preparation); USES (Uses)
(LHRH antagonist synthetic peptide analogs with pharmaceutical applications as cancer inhibitors or contraceptive agents)
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ANSWER 4 OF 7 HCAPLUS COPYRIGHT 2001 ACS
L39
                    1987:96973 HCAPLUS
                    106:96973
                    Contraception in dogs with luteinizing hormone releasing hormone
                    antagonists
                   Vickery, Brian H.
Syntex (U.S.A.), Inc., USA
Eur. Pat. Appl., 19 pp.
CODEN: EPXXDW
 IN
 SO
DT
                    Patent
                    English
 FAN.CNT 1
                    PATENT NO.
                                                                                                                                                                         APPLICATION NO. DATE
                                                                                       KIND DATE
PI EP 199302 A2 19861029 EP 1986-105377
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE
AU 8656388 A1 19861023 AU 1986-56388
PRAI US 1985-725267 19850419
AB Contraception in female doce
                                                                                                                                                                        EP 1986-105372
                                                                                                                                                                                                                                           19860418
                                                                                                                                                                                                                                            19860418
                 AU 8556388 AI 19861023 AU 1966-36388 19660418
US 1985-725267 19850419
Contraception in female dogs comprises administering an LH-RH antagonist either during estrus or during pregnancy for a time sufficient to terminate either estrus or pregnancy. Thus, a bitch was bled and plasma progesterone (I) measured in nanograms/mL vs. the day of diestrus. On day -8 and -4 the plasma I was 4-6 ng/mL, at day 1 it was 30 ng/mL, it peaked at 60 ng/mL on day 9, and slowly decreased to 30 ng/mL on day 25. At day 25 the animal was given a daily s.c. injection of [N-Ac-D-Nal(2),1 D-p-Cl-Phe2, D-Trp3, D-Deh6, D-Ala10]LH-RH [D-Nal(2) = 3-(2-naphthyl)-D-alanyl; D-p-Cl-Ph = 3-(p-chlorophenyl)-D-alanyl; D-Deh = NG,NG-diethyl-D-homoarginine] for 7 days. After the 1st injection the plasma I dropped to 4 ng/mL, at the of the treatment the plasma I level was <1 ng/mL, and a fetus was expelled the 5th day of treatment with tissue mass expelled on day 49 which was 24 days after the start of treatment. A s.c. injectable soln. was formulated contg. LH-RH antagonist 10.0, benzyl alc. 9.0, AcOH 1.2, propylene glycol 200.0 and mannitol 35.0 mg, sterile H20 1.0 mL. 9034-40-6, LH-RH RL: BIOL (Biological study) (antagonists, as contraceptive in dog)
                                 (antagonists, as contraceptive in dog)
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ANSWER 5 OF 7 HCAPLUS COPYRIGHT 2001 ACS

1986:546417 HCAPLUS

105:146417

I Morphological studies of human endometrium during continuous
LH-RH agonist treatment

AU Lundkvist, Oerjan; Bergquist, Christer

CS Dep. Obstet. Gynecol., Univ. Hosp., Uppsala, S-75185, Swed.

Int. J. Fertil. (1986), 30(4), 65-70

CODEN: INJFA3; ISSN: 0020-725X

DT Journal
LA English
AB Light and electron microscopic studies were performed on endometrial biopsies from healthy women after 2-17 mo of daily intranasal treatment with the LH-RH agonist D-Ser(TBU)6-EA10-LRH

[104428-01-5] for contraceptive purposes. Hormone analyses revealed inhibition of ovulation in all the women. Light microscopy showed an inactive or weak proliferative endometrial pattern, with no signs of hyperplasia. Ultrastructurally, the epithelial and stromal cells of the endometrium displayed signs of low metabolic activity. Since the results are contradictory to those earlier presented by others, further studies are necessary to exclude the potential risk of hyperestrogenic stimulation of the endometrium during continuous LH-RH agonist treatment.

IT 9034-40-6D, analog

RL: BIOL (Biological study)

(uterus endometrium morphol. response to, as contraceptive in women)
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HUI 09/666,146

=> d bib abs hitrn 6

ANSWER 6 OF 7 HCAPLUS COPYRIGHT 2001 ACS
1985:464894 HCAPLUS
DN 103:64894
TI Comparison of LH-RH agonist and antagonist: antifertility and therapeutic developments
AU Corbin, Alan; Bex, Frederick J.; Jones, Robert C.
Endocr. Sect., Wyeth Lab., Inc., Philadelphia, PA, 19101, USA
Int. Congr. Ser. - Excerpta Med. (1984), 656(LHRH Its Analogues), 95-122
CODEN: EXMDA4; ISSN: 0531-5131
DT Journal; General Review
LA English
A review, with 25 refs., on the contraceptive and therapeutic activity and potency, under a variety of exptl. conditions, of highly potent LH-RH [9034-40-6] agonists and antagonists. LH-RH analog effects on ovulation, estrous cycle, male reprodn., endometriosis, prostatic carcinoma, and puberty are discussed.

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ANSWER 7 OF 7 HCAPLUS COPYRIGHT 2001 ACS
1981:598081 HCAPLUS
95:198081
TI Endometrial patterns in women on chronic luteinizing
hormone-releasing hormone agonist treatment for contraception
AU Bergquist, Christer; Nillius, Sven Johan; Wide, Leif; Lindgren, Anders
Dep. Obstet. Gynecol., Univ. Hosp., Uppsala, S-75014/14, Swed.
SFertil. Steril. (1981), 36(3), 339-42
CODEN: FESTAS; ISSN: 0015-0282
DT Journal
LA English
AB Endometrial biopsy specimens were obtained from 12 healthy women
under chronic intranasal LH-RH [9034-40-6] agonist treatment for
evaluation of the risk of endometrial hyperplasia during
long-term inhibition of ovulation. A single daily dose of 400 or 600
.mu.g of the superactive LH-RH agonist Hoe 766 [57982-77-1] was given for
13-55 wk. Treatment was monitored by clin. examn., basal body temp.
recordings, and frequently taken venous blood specimens for detn. of
estradiol [50-28-2] and progesterone [57-83-0]. Ovulation was inhibited
during all but 2 of the 102 treatment cycles. No pregnancy occurred. Six
of the women had slight menstrual-like bleeding, and 6 had amenorrhea
during the treatment period. No dysfunctional uterine bleeding occurred.
The dominating histol. picture of the 17 endometrial biopsies,
obtained after 78-380 days of treatment, was inactive or weak
proliferative glands with slightly atrophic stroma. There were no signs
of hyperplasia. After discontinuation of treatment ovulatory menstrual
cycles rapidly returned.

1034-40-6D, analogs
RL: BIOL (Biological study)
(intranasal contraceptive, uterus morphol. response to)
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ANSWER 1 OF 3 HCAPLUS & COPYRIGHT 2001 ACS
                 2001:73538 HCAPLUS
                 134:136699
DN
                Pharmaceutical formulations comprising water-insoluble complex of a peptides for sustained drug delivery Gefter, Malcolm L.; Barker, Nicholas; Musso, Gary; Molineaux, Christopher
                Praecis Pharmaceuticals, Inc., USA
U.S., 19 pp., Cont.-in-part of U.S. 5,968,895.
CODEN: USXXAM
                 Patent
DT
                English
 FAN.CNT 2
                                                                                                                                                APPLICATION NO.
                 PATENT NO.
                                                                          KIND
                                                                                             DATE
                                                                                                                                                                                                          19971211
                                                                                              20010130
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 PΙ
                 us 6180608
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                 CN 1245436
ZA 9710994
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                                                                                                                                                ZA 1997-10994
                                                                                                                                                                                                          19971208
                                                                                              19980710
                                                                         19961211
 PRAI US 1996-762747
               MARPAT 134:136699
Sustained delivery formulations comprising a water-insol. complex of a peptidic compd. (e.g., a peptide, polypeptide, protein, peptidomimetic or the like) and a carrier macromol. are disclosed. The formulations of the invention allow for loading of high concns. of peptidic compd. in a small vol. and for delivery of a pharmaceutically active peptidic compd. for prolonged periods, e.g., one month, after administration of the complex. The complexes of the invention can be milled or crushed to a fine powder. In powd. form, the complexes form stable aq. suspensions and dispersions, suitable for injection. In a preferred embodiment, the peptidic compd. of the complex is an LHRH analog, preferably an LHRH antagonist, and the carrier macromol. is an anionic polymer, preferably CM-cellulose. Methods of making the complexes of the invention, and methods of using LHRH-analog-contg. complexes to treat conditions treatable with an LHRH analog, are also disclosed. Thus, 50 mg of PPI-149 was dissolved in 2 mL of 5% mannitol and mixed with 2 mL of 0.5% CM-cellulose. The mixt. was stirred and immediately yielded a white ppt. The suspension was frozen and lyophilized to dryness to yield a PPI-149 sustained delivery complex. 9034-40-6D, LHRH, analogs 120287-85-6, Cetrorelix 183552-38-7, PPI-149
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (pharmaceutical formulations comprising water-insol. complex of peptides for sustained drug delivery)
                 MARPAT 134:136699
                            peptides for sustained drug delivery)
                  9034-40-6 HCAPLUS
 RN
                  Luteinizing hormone-releasing factor (9CI) (CA INDEX NAME)
  CN
               STRUCTURE DIAGRAM IS NOT AVAILABLE ***
                 120287-85-6 HCAPLUS

D-Alaninamide, N-acetyl-3-(2-naphthalenyl)-D-alanyl-4-chloro-D-
phenylalanyl-3-(3-pyridinyl)-D-alanyl-L-seryl-L-tyrosyl-N5-(aminocarbonyl)-
D-ornithyl-L-leucyl-L-arginyl-L-prolyl- (9CI) (CA INDEX NAME)
  RN
  CN
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Absolute stereochemistry.

PAGE 1-A

PAGE 1-B

183552-38-7 HCAPLUS
D-Alaninamide, N-acetyl-3-(2-naphthalenyl)-D-alanyl-4-chloro-Dphenylalanyl-3-(3-pyridinyl)-D-alanyl-L-seryl-N-methyl-L-tyrosyl-Dasparaginyl-L-leucyl-N6-(1-methylethyl)-L-lysyl-L-prolyl- (9CI) (CA INDEX NAME) RN CN

Absolute stereochemistry.

PAGE 1-B

RE.CNT 42

- (1) Anon; FR 2455459 1981 HCAPLUS (2) Anon; JP 63-310827 1988 HCAPLUS (3) Anon; WO 8805661 1988 HCAPLUS (4) Anon; EP 328090 1989 HCAPLUS (6) Anon; WO 9211844 1992 HCAPLUS
- ALL CITATIONS AVAILABLE IN THE RE FORMAT

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ANSWER 2 OF 3 HCAPLUS COPYRIGHT 2001 ACS
                2000:84613
                                                  HCAPLUS
DN
                132:141952
                Bioimplant formulations containing stearin
               Trigg, Timothy Elliot; Walsh, John Desmond; Rathjen, Deborah Ann
Peptech Limited, Australia
IN
               PCT Int. Appl., 37 pp. CODEN: PIXXD2
SO
DT
                Patent
               English
FAN.CNT 1
               PATENT NO.
                                                                    KIND
                                                                                       DATE
                                                                                                                                      APPLICATION NO.
PΤ
               wo 2000004897
                                                                       A1
                                                                                       20000203
                                                                                                                                      WO 1999-AU585
                                                                                                                                                                                           19990720
                                       AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ,
                          W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

9948890

A1 20000214

AU 1999-48890

19990720

1998-4730

19980720
                AU 9948890
PRAI AU 1998-4730
                AU 1998-4731
                                                                    19980720
               AU 1999-324
                                                                    19990513
               WO 1999-AU585
                                                                   19990720
              wo 1999-AU585 19990720
A pharmaceutical and/or veterinary formulation comprising about 2-30 % (wt./wt.) of at least 1 active agent, about 0.5-20.0% of a pore-forming agent and the balance stearin. Such formulations provide sustained release of the at least one active agent in humans and other animals for periods of 7 days up to about 2 yr. Stearin and lecithin were mixed with freeze-dried deslorelin. The mixed material was extruded by using a ram extruder and was equilibrated at 55.degree. The product was then extruded at a rate of 3 g over a 30-s period and cooled and the the long rods produced were sectioned into lengths of the required wt. In dissoln. tests, after an initial rapid release of deslorelin, a sustained release extending over a prolonged period (110 days) was achieved. The av. daily rate of deslorelin release during the sustained release period was within the range 50-2 .mu.g/day.
              the range 50-2 .mu.g/day.
9034-40-6, GnRH 9034-40-6D, LHRH, analogs
120287-85-6, Cetrorelix 144743-92-0, Teverelix
183552-38-7, Abarelix
               RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (bioimplant formulations contg. stearin)
RE.CNT
(1) Hoffman-La Roche, F; WO 9408623 1994 HCAPLUS
(2) Novo Nordisk AS; US 5179079 1993 HCAPLUS
(3) Peptide Technology Limited; WO 9700693 1997 HCAPLUS
(4) Yamanouchi Pharmaceutical Co; US 4578391 1986 HCAPLUS
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ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2001 ACS
           1998:402333 HCAPLUS
ΔN
DN
           129:86019
           Pharmaceutical formulations for sustained drug delivery of peptides
TI
TN
           Gefter, Malcolm L.; Barker, Nicholas; Musso, Gary; Molineaux, Christopher
          Praecis Pharmaceuticals Inc., USA; Gefter, Malcolm L.; Barker, Nicholas; Musso, Gary; Molineaux, Christopher J. PCT Int. Appl., 44 pp. CODEN: PIXXD2
PA
SO
DT
           Patent
          English
FAN.CNT 2
           PATENT NO.
                                               KIND DATE
                                                                                             APPLICATION NO. DATE
                                                             19980618
                                                                                             WO 1997-US22881
                                                                                                                                 19971211
PΙ
          wo 9825642
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                   W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL,
                            PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
                   RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM,
                            GA, GN, ML, MR, NE, SN, TD, TG
36 A 20000223
           CN 1245436
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                                                             19980710
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           ZA 9710994
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EP 1997-953188
          AU 9856991
                                                             19980703
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          EP 952843
                                                 A2
                                                            19991103
                                                                                                                                 19971211
                  R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO

2714015 A 20000509 BR 1997-14015 19971211
          BR 9714015
JP 2000508345
PRAI US 1996-762747
                                                             20000704
                                                                                             JP 1998-527002
                                                                                                                                  19971211
                                               19961211
          WO 1997-US22881
                                               19971211
          MARPAT 129:86019
          Sustained delivery formulations comprising a water-insol. complex of a peptidic compd. (e.g., a peptide, polypeptide, protein, peptidomimetic or the like) and a carrier macromol. are disclosed. The formulations of the
         the like) and a carrier macromol. are disclosed. The formulations of the invention allow for loading of high concns. of peptidic compd. in a small vol. and for delivery of a pharmaceutically active peptidic compd. for prolonged periods, e.g., one month, after administration of the complex. The complexes of the invention can be milled or crushed to a fine powder. In powd. form, the complexes form stable aq. suspensions and dispersions, suitable for injection. In a preferred embodiment, the peptidic compd. of the complex is an LHRH analog, preferably an LHRH antagonist, and the carrier macromol. is an anionic polymer, preferably CM-cellulose. Methods of making the complexes of the invention, and methods of using LHRH-analog-contg. complexes to treat conditions treatable with an LHRH analog, are also disclosed. An equal amt. of a 6.25 mg/mL PPI-149 (LHRH antagonist) was added to a soln. of 0.125% CM-cellulose and stirred overnight then filtered. The recovered white paste was rinsed with water and dried for 72 h to obtain 633 mg of a white powder contg. 57% PPI-149. 9034-40-6D, LHRH, analogs 120287-85-6, Cetrorelix 183552-38-7, PPI 149 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
          RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (pharmaceutical formulations for sustained drug delivery of peptides)
=> d ind 3
L49 ANSWER 3 OF 3 HCAPLUS COPYRIGHT 2001 ACS
          ICM A61K038-00
IC
                     A61K047-48: A61K038-09
CC
          63-6 (Pharmaceuticals)
          pharmaceutical sustained drug delivery peptide; CM cellulose PPI149
ST
          sustained drug delivery
Electron beams
TT
                 (irradn.; pharmaceutical formulations for sustained drug delivery of
                 peptides)
TT
          Antitumor agents
          Benign prostatic hyperplasia
          Contraceptives
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HUI 09/666,146

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ANSWER 1 OF 6 HCAPLUS **COPYRIGHT 2001 ACS 2000:15210 HCAPLUS
4L57
 AN
                       132:64179
 DN
                       Preparation of thienopyridines possessing excellent gonadotropin-releasing
 TI
                      Frequency in the Hoppy in the Special State of Special Sp
 ΤN
  PA
                       PCT Int. Appl., 111 pp.
  SO
                       CODEN: PIXXD2
 DT
                       Patent
                       English
 LA
 FAN.CNT 1
                       PATENT NO.
                                                                                                 KIND DATE
                                                                                                                                                                                            APPLICATION NO. DATE
                      wo 2000000493
                                                                                                     A1
                                                                                                                            20000106
                                                                                                                                                                                            WO 1999-JP3379
                                                                                                                                                                                                                                                                       19990624
 PΙ
                                      2000000493 A1 20000106 W0 1999-JP3379 19990624
W: AE, AL, AM, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, EE, GD,
GE, HR, HU, ID, IL, IN, IS, JP, KG, KR, KZ, LC, LK, LR, LT, LV,
MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, SL, TJ, TM,
TR, TT, UA, US, UZ, VN, YU, ZA, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK,
ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG,
CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
9943931 A1 20000117 AU 1999-43931 19990624
1090010 A1 20010411 EP 1999-926797 19990624
R: AT BE, CH, DE, DK, ES, ER, GR, TT, LT, LU, NL, SE, MC, PT,
                       AU 9943931
                       EP 1090010
                                                        AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
                                        R:
                                                          IE, FI
                       JP 3028486
                                                                                                                            20000404
                                                                                                                                                                                            JP 1999-179206
                                                                                                                                                                                                                                                                     19990625
                       JP 2000219690
                                                                                                                            20000808
                                                                                                     A2
                                                                                                                                                                                            JP 1999-273754
NO 2000-6479
                       JP 2000219691
                                                                                                     A2
                                                                                                                            20000808
                                                                                                                                                                                                                                                                       19990625
                                                                                                                                                                                                                                                                        20001219
                       NO 2000006479
                                                                                                                            20001219
 PRAI JP 1998-181263
JP 1998-333004
                                                                                                 19980626
                                                                                                 19981124
                       WO 1999-JP3379
                                                                                                 19990624
                       JP 1999-179206
                                                                                                 19990625
                       MARPAT 132:64179
```

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

The title compds. [I; R1 = (un)substituted alkyl, cycloalkyl, alkoxyamino, hydroxyamino; R2 = (un)substituted alkyl, Ph (when R1 = unsubstituted alkyl, then R2 = substituted alkyl or substituted Ph)], which possess excellent gonadotropin-releasing hormone antagonizing activity, and are useful for preventing or treating sex hormone-dependent diseases, e.g., sex hormone-dependent cancers (e.g., prostatic cancer, uterine cancer, breast cancer, pituitary tumor), prostatic hypertrophy, hysteromyoma, endometriosis, precocious puberty, amenorrhea syndrome, multilocular ovary syndrome, pimples etc., or as a pregnancy regulator (e.g., contraceptive), infertility remedy or menstruation regulator, were prepd. and formulated. Thus, reacting amine II (prepn. given) with cyclopropanecarboxylic acid in the presence of EtN(iso-Pr)2 and PyBop in CH2Cl2 followed by treatment of free base with HCl soln. in Et20 afforded I.HCl [R1 = cyclopropyl; R2 = iso-Pr] which showed IC50 of 0.06 .mu.M and 0.0001 .mu.M against 125I-leuprorelin binding at rat and human membrane fractions, resp. RE.CNT 2

RE

(1) Hayase, Y; WO 9741126 A 1997 HCAPLUS

(2) Takeda Chemical Industries Ltd; EP 0781774 A 1997 HCAPLUS

```
ANSWER 2 OF 6 HCAPLUS COPYRIGHT 2001 ACS
                1998:502537
                                                     HCAPLUS
AN
DN
               129:136498
TI
               Preparation of luteinizing hormone releasing hormone analogs
IN
               Shaobo, Xiao
PΑ
               Asta Médica Aktiengesellschaft, Germany
               U.S., 15 pp. Cont.-in-part of U.S. Ser. No. 265,631, abandoned. CODEN: USXXAM
SO
DT
               Patent
ΙA
               English
FAN. CNT 2
               PATENT NO.
                                                                  KIND DATE
                                                                                                                                   APPLICATION NO. DATE
PT
               US 5783562
                                                                                     19980721
                                                                                                                                  US 1995-450951
                                                                                                                                                                                       19950523
               CN 1061605
                                                                      Α
                                                                                     19920603
                                                                                                                                   CN 1990-108955
                                                                                                                                                                                       19901110
                CN 1036343
                                                                      R
                                                                                     19971105
PRAI CN 1990-108955
US 1991-789730
US 1994-265631
                                                                  19901110
                                                                  19911112
                                                                  19940624
             MARPAT 129:136498

A method is provided for the design and synthesis of LH
-releasing hormone (LHRH) antagonists, e.g.

AC-D-2Nal-D-pClPhe-AA3-Ser-AA5-D-3Pal-Leu-AA8-Pro-D-Ala-NH2 [I; 2Nal =
3-(2-naphthyl)alanine; pclPhe = 4-chlorophenylalanine; AA3 = D-Phe,
3-(3-pyridyl)alanine (D-3Pal); AA5 = Arg, 4-(4-morpholinylmethyl)-L-
phenylalanine (Mop); AA8 = Arg, 4-(dipropylaminomethyl)-L-phenylalanine],
having exact amino acid sequences and contg. 5-100 amino acids. This
method can be used to produce peptides useful in treating disorders of the
reproductive endocrine system, including endometriosis,
precocious puberty, prostate cancer and breast cancer. Addnl., peptides
produced by this method can be used as contraceptives for either
males or females. Peptides produced by this method can further be
employed in the diagnosis and treatment of infertility. Thus, nonnatural
arom. amino acids were prepd. and coupled via solid-phase methods on a
benzhydrylamine resin to produce a no. of decapeptide amides, including I
(AA3 = D-3Pal, AA5 = Mop, AA8 = Arg) (II). Decapeptide amides, including I
(AA3 = D-3Pal, AA5 = Mop, AA8 = Arg) (II). Decapeptide amide II showed
100% antiovulatory activity at 1.0 .mu.g, and ED50 = 14.7 .mu.g/mL for
histamine release activity.
               MARPAT 129:136498
              histamine release activity.
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=> d ind 2

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ANSWER 2 OF 6 HCAPLUS COPYRIGHT 2001 ACS
 ICM A61K038-00
          A61K038-24; A01N037-18; C04K005-00
  514015000
 34-3 (Amino Acids, Peptides, and Proteins)
Section cross-reference(s): 2
 LH releasing hormone analog prepn; substance P analog prepn LHRH
 antagonist
 Gonadotropin receptors
 RL: BPR (Biological process); BIOL (Biological study); PROC (Process) (prepn. of LH releasing hormone analogs)
9034-40-60P, LH-RH, analogs 33507-63-00P, Substance P, analogs
 9034-40-6DP, LH-RH, analogs
93128-18-8P 101685-06-7P
126681-87-6P 126681-88-7P
                                                                                  Substance P, analogs
126681-85-4P 126681-86-5P
                                                      103974-88-5P
137524-97-1P
137525-02-1P
144230-85-3P
                            126681-88-7P
137525-01-0P
144208-20-8P
210642-88-9P
                                                                                    137524-98-2P
137525-03-2P
210642-85-6P
210642-90-3P
                                                                                                                137524-99-3P
137525-04-3P
 137525-00-9P
 144208-19-5P
                                                                                                                 210642-86-7P
 210642-87-8P
210642-93-6P
                                                         210642-89-0P
                                                                                                                210642-91-4P
 RL: BAC (Biological activity or effector, except adverse); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses) (prepn. of LH releasing hormone analogs)
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L57 ANSWER 3 OF 6 HCAPLUS COPYRIGHT 2001 ACS
             1997:9227
                                          HCAPLUS
             126:31668
DN
TI
             Preparation of cyclic pentapeptide LH-RH receptor antagonists
             Kitada, Chieko; Furuya, Shuichi; Kato, Koichi
Takeda Chemical Industries, Ltd., Japan; Kitada, Chieko; Furuya, Shuichi;
IN
             Kato, Koichi
             PCT int. Appl., 199 pp.
             CODEN: PIXXD2
             Patent
             Japanese
FAN. CNT 1
             PATENT NO.
                                                           KIND DATE
                                                                                                                    APPLICATION NO.
                                                                                                                                                                  DATE
                                                                                                                                                                  19960425
            WO 9634012
                                                            A1
                                                                           19961031
                                                                                                                    WO 1996-JP1140
                                  AL, AM, AU, AZ, BB, BG, BR, BY, CA, CN, CZ, EE, GE, HU, IS, KG, KR, KZ, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TJ, TM, TR, TT, UA, US, UZ, VN, AM, AZ, BY, KG, KZ,
                                   MD, RU
                       RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG

215737 AA 19961031 CA 1996-2215737 19960425
             CA 2215737
             AU 9655143
                                                                            19961118
                                                                                                                    AU 1996-55143
                                                                                                                                                                   19960425
                                                              A1
                                                                       19980211
                                                                                                                    EP 1996-912247
             EP 822939
                                                              A1
                                                                                                                                                                  19960425
             R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI
CN 1183104 A 19980527 CN 1996-193586 19960425
JP 09025294 A2 19970128 JP 1996-107405 19960426
US 6136781
PRAI JP 1995-106775
JP 1995-110933
                                                                             20001024
                                                                                                                    US 1996-656244
                                                                                                                                                                  19960606
                                                           19950428
                                                           19950509
             WO 1996-JP1140
                                                          19960425
           MARPAT 126:31668
LH-RH receptor antagonists contg. cyclic pentapeptides or salts thereof and novel cyclic pentapeptide or salts thereof are provided. These LH-RH receptor antagonists are effective as medicines for preventing and curing sex hormone-dependent cancers (e.g., prostatic cancer, uterine cancer, mammary cancer, pituitary tumor, etc.), prostatomegaly, endometriosis, hysteromyoma, puberty precox, amenorrheal syndromes, multilocular ovarian syndromes, comedo, etc, and are also effective as pregnancy controlling agents (e.g., contraceptives, etc.) and menstrual cycle controlling agents.
Moreover, these are also useful in the livestock industry for the control fo the estrus of animals and also for the improvement in the quality of meat and for the control of the growth of animals, as well as in the marine products industry as spawning promoters for fishes. Thus, cyclo(Phg-D-Arg(Tos)-Phe-D-Ala-Trp) (Phg = L-phenylglycine, Tos = tosyl), prepd. by std. 9-fluorenylmethoxycarbonyl (Fmoc) chem. on a Wang resin, exhibited IC50 = 0.07 .mu.M in a LH-RH receptor assay. Ref. compd. cyclo(Tyr-D-Trp-Leu-Arg-Trp-Pro) showed IC50 = 10 .mu.M in the same assay.
             MARPAT 126:31668
os
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IT

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ANSWER 4 OF 6 HCAPLUS COPYRIGHT 2001 ACS 1993:161110 HCAPLUS 118:161110
L57
AN
DN
            GORKH ANTAGONISTS: Primate models for clinical indications
Gordon, Keith; Danforth, Douglas R.; Williams, Robert F.; Hodgen, Gary D.
Jones Inst. Reprod. Med., East Virginia Med. Sch., Norfolk, VA, USA
Modes Action GnRH GnRH Analogs, [Proc. Symp.] (1992), Meeting Date 1991,
332-46. Editor(s): Crowley, William F., Jr.; Conn, P. Michael. Publisher:
Springer, New York, N. Y.
CODEN: 58UPAS
Conference; General Review
English
A review with 75 refs. of the impact of the publisher.
             GnRH antagonists: Primate models for clinical indications
ΤI
ΑU
CS
SO
DT
IΑ
            A review, with 75 refs., of the impact of LH-RH and its analogs on clin. management of infertility and reproductive endocrinol. The following topics are discussed: ovulation induction with gonadotropins; ovulation induction with pulsatile LH-RH; endometriosis; prostatic carcinoma, contraception; diagnosis of osteoporosis risk.
=> d ind 4
          ANSWER 4 OF 6 HCAPLUS COPYRIGHT 2001 ACS 2-0 (Mammalian Hormones)
             review LHRH antagonist clin indication
Contraceptives
ST
IT
            (LH-RH antagonists clin. management studies in, for infertility and reproductive endocrinol.)

Fertility
IT
            (disorder, LH-RH antagonists for management of)
9034-40-6, LH-RH
RL: BIOL (Biological study)
(antagonists, clin. applications of, for contraception and infertility)
```

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ANSWER 5 OF 6 HCAPLUS COPYRIGHT 2001 ACS 1992:605942 HCAPLUS
DN
                117:205942
                Peptide analogs as LH-RH antagonists
IN
               Xiao, Shaobo
                Asta Medica Aktiengesellschaft, Germany
                PCT Int. Appl., 46 pp. CODEN: PIXXD2
SO
DT
                Patent
                English
FAN.CNT
               PATENT NO.
                                                                    KIND DATE
                                                                                                                                       APPLICATION NO. DATE
               WO 9208733
PΙ
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                                                                                      19920529
                                                                                                                                      WO 1991-EP2110
                                                                                                                                                                                            19911108
               W: AU, CA, CS, FI, HU, JP, KR, NO, PL, SU
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL
CA 2095932 AA 19920511 CA 1991-2095932
                                                                                                                                                                                NL, SE
32 19901108
                CN 1061605
                                                                                        19920603
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                                                                                                                                                                                            19901110
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                ZA 9108847
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                                                                                                                                       ZA 1991-8847
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               AU 9188612
                                                                        A1
                                                                                       19920611
                                                                                                                                                                                            19911108
                AU 662496
                                                                       В2
                                                                                       19950907
               EP 564466
                                                                       A1
                                                                                        19931013
                                                                                                                                       EP 1991-919435
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                                                                                      19970305

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    19970305

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    AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE

    70166
    A2
    19950928
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    2100965
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    19911108

    284168
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    CZ
    1993-848
    19911108

    2123499
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    19950420
    LV
    1992-175
    19921027

    9301697
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    1993-1697
    19930510

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    1993-1513
    19931203

    1990-108955
    19901110

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               PL 170564
AT 149520
               ES 2100965
               CZ 284168
RU 2123499
               LV 10106
               NO 9301697
                LT 3971
PRAI CN 1990-108955
                                                                    19901110
               WO 1991-EP2110
MARPAT 117:205942
                                                                   19911108
             MARPAT 117:205942
The known LH-RH antagonist N-acetyl-D-.beta.-(2-naphthyl)alanyl-p-chloro-D-phenylalanyl-D-.beta.-(3-pyridyl)alanyl-seryl-tyrosyl-arginyl-leucyl-arginyl-prolyl-D-alaninamide is modified in both alk. and lipophilic regions based on its topol. similarity to substance P to obtain new LH-RH antagonists having both high antiovulatory activity and low histamine-releasing activity. These compds. may be used as male and female contraceptives or to treat reproductive endocrinol. disorders including endometriosis, precocious puberty in children, prostate cancer, breast cancer, and infertility. Thus, N-acetyl-D-.beta.-(2-naphthyl)alanyl-p-chloro-D-phenylalanyl-D-.beta.-(3-pyridyl)alanyl-seryl-arginyl-D-.beta.-(3-pyridyl)alanyl-leucyl-arginyl-prolyl-D-alaninamide showed an ID60 of 0.12 .mu.g for antiovulatory activity in rats in vivo and an EC50 of 3.5 .mu.g/mL for histamine-releasing activity on rat peritoneal leukocytes (5-10% mast cells) in vitro.
os
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=> d bib abs hitrn 6
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ANSWER 6 OF 6 HCAPLUS COPYRIGHT 2001 ACS
      1987:433198 HCAPLUS
DN
     107:33198
     Preparation and use of indolobenzodiazepines for antagonizing luteinizing
     hormone releasing hormone
     Ho, Chih Yung
     McNeilab, Inc., USA
Eur. Pat. Appl., 12 pp.
PA
     CODEN: EPXXDW
DT
     Patent
     English
FAN.CNT 2
      PATENT NO.
                         KIND
                                DATE
                                                  APPLICATION NO.
                                                                      DATE
     EP 219292
                          A2
                                19870422
                                                  EP 1986-307693
                                                                      19861006
     R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE
US 4678784 A 19870707 US 1985-784963
                                                                      19851007
     DK 8604771
                                19870408
                                                  DK 1986-4771
                                                                      19861006
     AU 8663623
                                19870409
                                                  AU 1986-63623
                                                                      19861007
JP 62116514
PRAI US 1985-784963
US 1984-599095
                                19870528
                                                  JP 1986-237280
                                                                      19861007
                         19851007
                          19840411
     US 1985-721723
                         19850410
GI
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AB Fused tetracyclic benzodiazepines I (R1 = acyclic or cyclic amine; R2 = H, alkoxy, alkyl, CF3, halogen, NO2, OH, dialkylamino) are prepd. for use as antagonists of LH-RH. 12-(4-Methyl-1-piperazinyl)-6H-indolo[2,1-c][1,4]benzodiazepine (II) was prepd. from NaH-treated Et 2-indolecarboxylate and 2-nitrobenzyl chloride in 4 steps. II, given orally at 0.5 mg/kg body wt. on each of the 3 days prior to expected ovulation, inhibited ovulation in rats; given orally at 50 mg/kg for the 1st 13 days of pregnancy, II prevented implantation in 3 of 5 treated mice.

=> d ind 6

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L57
      ANSWER 6 OF 6 HCAPLUS COPYRIGHT 2001 ACS
      ANSWER 6 OF 6 HCAPLUS COPYRIGHT ZUUT ACS
ICM A61K031-55
1-10 (Pharmacology)
Section cross-reference(s): 2, 28
indolobenzodiazepine antagonist LHRH; benzodiazepine indolo antagonist
LHRH; ovulation inhibition indolobenzodiazepine; contragestation agent
indolobenzodiazepine
CC
ST
       Contraceptives
(indolobenzodiazepine LH-RH antagonists)
TT
       Ovulation
IT
           (inhibition of, by indolobenzodiazepine LH-RH antagonists)
       Puberty
IT
            (disorder, precocious, treatment of, with indolobenzodiazepine LH-RH
           antagonists)
       Uterus, disease or disorder
IT
            (endometriosis, treatment of, with indolobenzodiazepine LH-RH
            antagonists)
      9034-40-6, LH-RH
RL: BIOL (Biological study)
IT
            (antagonists, indolodiazepines as)
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HUI 09/666,146

101226-27-1P 102392-96-1P 101226-25-9P 101226-31-7P 102392-99-4P 101226-26-0P 101226-32-8P 101226-28-2P 101226-29-3P IT 102392-97-2P 10220-29-3P 102392-99-4P
RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of, as LH-RH antagonist)
99384-52-8P 101226-22-6P 101226-23-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of, in indolobenzodiazepine LH-RH antagonist synthesis)
109-01-3 110-16-7, Maleic acid, biological studies 110-17-8, Fumaric acid, biological studies 110-89-4, Piperidine, biological studies
110-91-8, Morpholine, biological studies 120-18-3, 2-Naphthalenesulfonic acid 120-43-4 5317-32-8, 1-Piperazinepropanol 5382-16-1 5610-49-1
RL: RCT (Reactant) IT IT aciu 12U-43-4 531/-32-8, 1-Piperazinepropanol 5382-16-1 5610-RL: RCT (Reactant) (reaction of, in indolobenzodiazepine LH-RH antagonist synthesis) 612-23-7, 2-Nitrobenzyl chloride RL: RCT (Reactant) IT

(reaction of, with Et indolecarboxylate in indolobenzodiazepine LH-RH antagonist synthesis)

3770-50-1, Ethyl 2-indolecarboxylate
RL: RCT (Reactant)

(reaction of with pitroboxylate)

IT

(reaction of, with nitrobenzyl chloride in indolobenzodiazepine LH-RH antagonist synthesis)

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      FILE 'HCAPLUS' ENTERED AT 10:28:14 ON 17 APR 2001
E ENDOMETR/CT
E ENDOMETRE+ALL/CT
                                                                            this search uses control terms (CT) to cast a wider net for good citations
                    E ENDOMETRIOSIS+ALL/CT
L1
               300 S E1
                    E UTERUS, DISEASE (L) ENDOMETRIOSIS/CT
L2
              1321 S E3-15
                    E FALLOPIAN TUBE+ALL/CT
E FALLOPIAN TUBE/CT
                    E FTO/BI
L3
               144 S E3
                    E FALLOPIAN TUBE/BI
E FALLOPIAN OBSTRUCT/BI
                    E FALLOPIAN+ALL/CT
                       FALLOPIAN TUBE+ALL/CT
                    E OVIDUCT/CT
                    E OVIDUCT+ALL/CT
            4024 S E6-13
10656 S OBSTRUCT?
L5
L6
                12 S L4 AND L5
E OVIDUCT(L)OBSTRUCTION/CT
E PELVIS/CT
                    E PELVIC/CT
              E PAIN/CT
1371 S PAIN (L) ANALGESICS/CT
L7
                    E PAIN+ALL/CT
              6169 S E3
             29052 S E7-8
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                    E E6
                    E MENSTRUATION DISORDER+ALL/CT
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                        MENSTRUATION DISORDER+ALL/CT
            371 S E1-2
40034 S L1-2 OR L4-6 OR 10-11
L11
L12
                    E LHLR/CT
                      LH-RH ANTAGONIST/CT
                    E LUTENIZING/CT
                    E CETRORELIX/CT
                       CETRIMONIUM+HIE/CT
                      ANTAGONIST/CT
L13
               789 S LH-RH(3A)ANTAGON?
                    E CONTRACEPTIVES+ALL/CT
              9956 S E5
                       E11 OR E30 OR E34
L15
              3581 S
                    E ANTIRHEUMATIC AGENTS+ALL/CT
              1486 S E5 OR E18
L16
                    E ANTIPROLIFERATION+ALL/CT
               505 S E6
L17
                    E CEEL PROLIFERATION+ALL/CT
                    E CEL PROLIFERATION+ALL/CT
                     E CELL PROLIFERATION+ALL/CT
L18
             56906 S E1 OR E4 OR 10-11
                    E UTERUS, DISEASE+ALL/CT
              1413 S E3-5
L19
                    E DRUG+ALL/CT
                    E DRUGS+ALL/CT
E DRUGS(L)UTERUS/CT
E DRUGS/CT
           E DRUGS/CT

311028 S L12 OR 192 all terms for claimed driesure States
38 S L20(L)L13
306 S CETRORELIX OR TEVERELIX OR GANIRELIX OR ANTIDE OR ABARELIX O
20 S L20 AND L22
51 S L21 OR L23
L20
L21
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S CETRORELIX/CN

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FILE 'REGISTRY' ENTERED AT 11:33:52 ON 17 APR 2001
1 S CETRORELIX/CN
L25
        FILE 'HCAPLUS' ENTERED AT 11:33:53 ON 17 APR 2001
137 S L25
S TEVERELIX/CN
L26
         FILE 'REGISTRY' ENTERED AT 11:34:25 ON 17 APR 2001
                        1 S TEVERELIX/CN
L27
        FILE 'HCAPLUS' ENTERED AT 11:34:26 ON 17 APR 2001
8 S L27
L28
                            S ABARELIX/CN
        FILE 'REGISTRY' ENTERED AT 11:35:02 ON 17 APR 2001
                        1 S ABARELIX/CN
L29
        FILE 'HCAPLUS' ENTERED AT 11:35:02 ON 17 APR 2001
16 S L29
L30
                            S ANTIDE/CN
         FILE 'REGISTRY' ENTERED AT 11:35:17 ON 17 APR 2001
                        1 S ANTIDE/CN
L31
        FILE 'HCAPLUS' ENTERED AT 11:35:18 ON 17 APR 2001
94 $ L31
1314 $ (LH OR LHRH) (3A) ANTAGON?
67 $ L20 AND (L26 OR L28 OR L30 OR L32 OR L33) } L(HKH antagonists
73 $ L34 OR L24
15 $ L35 AND L15
2 $ L35 AND L15
1 $ L35 AND L16
9 $ L35 AND L17-18
1 $ L35 AND L17-18
23 $ L36-40
8 $ L41 AND PY>1999- cites 7 & 8 only -dates on 1-6 are no good
15 $ L41 NOT L42 15 cites
10 $ L44 AND PY>1999 #10 only, 1-9 have bad dates
40 $ L44 NOT L45
7 $ L46 AND ENDOMETR? 7 cites
L32
L33
L34
L35
L36
L37
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L39
L41
L42
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L44
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L46
                           S L44 NOT L43
S L46 AND ENDOMETR? 7 CITES
£47
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C L42 ANSWER 7 OF 8 HCAPLUS COPYRIGHT 2001 ACS
                         1998:402333 HCAPLUS
       ΔN
                         129:86019
       DN
                         Pharmaceutical formulations for sustained drug delivery of peptides
Gefter, Malcolm L.; Barker, Nicholas; Musso, Gary; Molineaux, Christopher
        TI
        IN
                         Praecis Pharmaceuticals Inc., USA; Gefter, Malcolm L.; Barker, Nicholas; Musso, Gary; Molineaux, Christopher J. PCT Int. Appl., 44 pp.
       РΔ
        SO
                         CODEN: PIXXD2
       DT
                         Patent
       LA English FAN.CNT 2
                                                                                                                                                                  APPLICATION NO.
                                                                                                                                                                                                                               DATE
                         PATENT NO.
                                                                                      KIND DATE
                                      9825642

A2 19980618

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG

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A 20000223

CN 1997-181608

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ZA 1997-10994
                          CN 1245436
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                                                                                                                                                                   EP 1997-953188
                                                                                                                                                                                                                                19971211
                          EP 952843
                         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO
BR 9714015 A 20000509 BR 1997-14015 19971211 <--
                                                                                                                                                                  BR 1997-14015
JP 1998-527002
        JP 2000508345
PRAI US 1996-762747
WO 1997-US22881
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                        MARPAT 129:86019
Sustained delivery formulations comprising a water-insol. complex of a peptidic compd. (e.g., a peptide, polypeptide, protein, peptidomimetic or the like) and a carrier macromol. are disclosed. The formulations of the invention allow for loading of high concns. of peptidic compd. in a small vol. and for delivery of a pharmaceutically active peptidic compd. for prolonged periods, e.g., one month, after administration of the complex. The complexes of the invention can be milled or crushed to a fine powder. In powd. form, the complexes form stable aq. suspensions and dispersions, suitable for injection. In a preferred embodiment, the peptidic compd. of the complex is an LHRH analog, preferably an LHRH antagonist, and the carrier macromol. is an anionic polymer, preferably CM-cellulose. Methods of making the complexes of the invention, and methods of using LHRH-analog-contg. complexes to treat conditions treatable with an LHRH analog, are also disclosed. An equal amt. of a 6.25 mg/mL PPI-149 (LHRH antagonist) was added to a soln. of 0.125% CM-cellulose and stirred overnight then filtered. The recovered white paste was rinsed with water and dried for 72 h to obtain 633 mg of a white powder contg. 57% PPI-149. 120287-85-6, Cetrorelix 183552-38-7, PPI 149
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses) (pharmaceutical formulations for sustained drug delivery of peptides)
                          MARPAT 129:86019
         OS.
         TT
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L42 ANSWER 8 OF 8 HCAPLUS COPYRIGHT 2001 ACS
AN 1997:168540 HCAPLUS
              126:152828
DN
              LHRH antagonist synthetic peptide analogs for use as cancer inhibitors, contraceptives, or other pharmaceuticals
ΤI
IN
               Roeske, Roger W.
              Indiana University Foundation, USA; Roeske, Roger W. PCT Int. Appl., 52 pp.
CODEN: PIXXD2
PA
SO
DT
               Patent
              English
LA
FAN.CNT 1
                                                                                                                             APPLICATION NO.
                                                                                                                                                                              DATE
               PATENT NO.
                                                                KIND
                                                                                 DATE
                                                                                                                                                                              19960607
              WO 9640757
                                                                                 19961219
                                                                                                                             wo 1996-US9852
                                                                  A2
PΙ
              WO 9640757
                                                                                 19970220
                                                                  Α3
              W: AU, CA, JP, US
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE
US 5843901 A 19981201 US 1995-480494 19950607
CA 2219460 AA 19961219 CA 1996-2219460 19960607
              AU 9661680
AU 715399
                                                                                                                             AU 1996-61680
                                                                                                                                                                               19960607 <--
                                                                  A1
                                                                                 19961230
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                                                                                 20000203
R: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE
JP 11507374
T2 19990629
JP 1996-502050
19960607
PRAI US 1995-480494
19950607
W0 1996-US9852
19960607
             WO 1996-US9852 19960607

MARPAT 126:152828

Many novel LH-releasing hormone(LHRH)

antagonist peptide analogs or peptide mimetics, pharmaceutical compns. thereof, and methods of use thereof, are disclosed. The LHRH antagonist comprises a peptide compd., wherein a residue of the peptide compd. corresponding to the amino acid at position 6 of natural mammalian LHRH comprises a hydrophilic N-acyl moiety, a dipolar moiety, a sulfonium moiety, a receptor-modifying moiety or a small polar moiety. LHRH antagonist peptides are useful as inhibitors of sex hormone-dependent cancers (e.g., prostate cancer). LHRH antagonist peptides are also useful as contraceptive agents. The peptides can be used to treat other LHRH-related disorders as well, such as precocious puberty or premenstrual syndrome. The anti-ovulatory and histamine release activity of LHRH antagonists are compared. S.c. injections of LHRH antagonists suppressed plasma testosterone levels.
os
 AB
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ANSWER 1 OF 15 HCAPLUS COPYRIGHT 2001 ACS

1997:291604 HCAPLUS

N 127:994

Inhibitory effect of gonadotropin-releasing hormone (GnRH) on rat granulosa cell deoxyribonucleic acid synthesis

AU Saragueta, Patricia E.; Lanuza, Guillermo M.; Baranao, J. Lino

Inst. Biologia Medicina Exptl.-CONICET, Facultad Ciencias Exactas
Naturales, Buenos Aires, 1428, Argent.

SO Mol. Reprod. Dev. (1997), 47(2), 170-174

CODEN: MREDEE; ISSN: 1040-452X

PB Wiley-Liss

DT Journal

LA English

AB Gonadotropin-releasing hormone (GnRH) has been found to be expressed within the ovary and to modulate cell differentiation in ovarian cells. In the present study we have analyzed the influence of GnRH on DNA synthesis in rat granulosa cells. Cells were obtained from immature DES-treated rats and cultured in defined medium (DMEM:F12) contg. combinations of FSH, estradiol, and transforming growth factor-.beta. (TGF-.beta.), both in the presence and absence of GnRH. A GnRH analog, Leuprolide (GnRHa), caused a dose-dependent inhibition of 3H-thymidine incorporation in cells cultured in the presence of FSH (20 ng/mL) and TGF.beta. (2.5 ng/mL), at concns. as low as 5.times.10
11 M. Similarly, a complete inhibition of hormonally stimulated DNA synthesis was obsd. with another analog (Buserelin, ED50 = 1.58.+-.0.22.times.10-10 M) and native GnRH (ED50 = 1.4.+-.0.3.times.10-6 M). A competitive antagonist of GnRH (Antide) was used to neutralize the GnRH agonist effects. Antide 10-8 M could prevent the inhibition elicited by 10-7 M of Leuprolide. These results suggest that GnRH may play a role in the regulation of rat granulosa cell proliferation during follicular development.

ANSWER 2 OF 15 HCAPLUS COPYRIGHT 2001 ACS 1997:288643 HCAPLUS 127:16444_ 143 ΔN DN Jurkat cell proliferative activity is increased by luteinizing TT hormone-releasing hormone
Azad, N.; LaPaglia, N.; Kirsteins, L.; Uddin, S.; Steiner, J.; Williams,
D. W.; Lawrence, A. M.; Emanuele, N. V.
Res. Service, Dep. Veterans Affairs, Edward Hines Jr Hospital, Hines, IL, ΔU CS Res. Service, Dep. Vections And 1, 60141, USA
J. Endocrinol. (1997), 153(2), 241-249
CODEN: JOENAK; ISSN: 0022-0795
Journal of Endocrinology SO PR Journal of Endocrinology Journal English
Jurkat cells were used to study the immunomodulatory role of LH-releasing hormone (LHRH) in immune cells. The Jurkat cell, a human mature leukemic cell line, phenotypically resembles resting human T lymphocytes and has been widely used to study T cell physiol. The data from this study demonstrate that the Jurkat cell concn. of immunoreactive LHRH was 210.+-.36 pg/106 cells and that of proLHRH was 188.+-.27 pg/106 cells. The authenticity of this LHRH immunoreactivity is documented in two ways. First, both Jurkat LHRH and proLHRH immunoreactivity demonstrate dilutional parallelism with hypothalamic LHRH and proLHRH. Second, Jurkat lysates show LHRH bioactivity by releasing LH from rat anterior pituitary cells in culture. The presence of substantial amts. of LHRH in medium in which Jurkat cells were cultured for 72 h indicated that LHRH can be released from the cells. Using specific primers to exons 2 and 4 of the LHRH gene, we have found that Jurkat cells (like human T cells) express LHRH mRNA. The LHRH agonist, des-Gly10,D-Trp6-LHRH ethylamide, significantly increases the proliferative activity of Jurkat cells, as assessed by tritiated thymidine incorporation, from 15 980.+-.1491 c.p.m. in controls to 28 934.+-.3395, 30 457.+-.3861 (P=0.05 vs. control) or 35 299.+-.5586 c.p.m. (P<0.01 vs. control) with 10-11, 10-9 or 10-7 M agonist resp. LHRH antagonist, [D-pcGlu1,D-phe2,D-Trp3,6]-LHRH, at a concn. of 10-8 M decreases Jurkat cell proliferative activity from 17 145.+-.526 c.p.m. in control medium to 10 653.+-.1323 c.p.m. (P=0.05) co-incubation with the LHRH antagonist completely inhibits the cell proliferative activity assessed by tritiated thymidine incorporation from 19 900.+-.2675 c.p.m. in media with 1:40, 1:20 and 1:10 diln. of purified antibody resp. (P<0.01, 1:10 diln. compared with control). In adn., the cAMP level in INRH-stimulated Jurkat cells is decreased to 74, 27 and 57% of control levels after 15, 30 and 45 min resp. of exposure to 10-7 M LHRH agonist. INRH-DT Journal LA

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ANSWER 3 OF 15 HCAPLUS COPYRIGHT 2001 ACS
           1995:795168 HCAPLUS
DN
           123:189355
          Ovulation control by regulating nitric oxide levels Garfield, Robert E.; Yallampalli, Chandrasekhar Board of Regents, University of Texas System, USA PCT Int. Appl., 30 pp.
TI
IN
SO
           CODEN: PIXXD2
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           Patent
           English
FAN. CNT
           PATENT NO.
                                                 KIND DATE
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PΙ
          WO 9515753
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                                                              19950615
                                                                                                 WO 1994-US14133 19941208
                   TD, TG
          US 5470847
                                                               19951128
                                                                                                US 1993-165309
                                                                                                AU 1995-13041
US 1995-477189
          AU 9513041
US 5643944
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PRAI US 1993-165309
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                                                                                                 US 1995-477187
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                                                 19931210
          WO 1994-US14133 19941208
Inhibition of ovulation in a female may be achieved by administering a
          Inhibition of ovulation in a female may be achieved by administering a nitric oxide synthase inhibitor, alone or in combination with one or more of a progestin, an estrogen, and an LH-RH antagonist, thereby preventing conception. The stimulation of ovulation in a female may be achieved by administering a nitric oxide source, optionally in further combination with one or more of clomiphene, a gonadotropin, and an LH-RH agonist. Thus, 27 days old immature rats were injected with 4 IU of pregnant mare's serum gonadotropin on day on. Two days later rats were injected with 40 mg of NG-nitro-L-arginine Me ester at 12 AM and 3 PM and animals were sacrificed one day later and example for the ovulatory response by counting the no. of Graafian
          examd. for the ovulatory response by counting the no. of Graafian follicles 3 and corpora lutea 5 in the ovaries. The no. of Graffian follicles and corpora lutea was 9.7 and 0.7 resp. as compared to 1.0 and
           10.0 for the controls.
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HUI 09/666,146

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L43 ANSWER 4 OF 15 HCAPLUS COPYRIGHT 2001 ACS
AN 1995:459340 HCAPLUS
DN 123:47250
TI Pharmacological influence on the fertility in man
AU Neye, Holger
CS Muenster, Germany
SO Dtsch. Apoth. Ztg. (1995), 135(8), 39-40, 42
CODEN: DAZEA2; ISSN: 0011-9857
DT Journal; General Review
German
AB A review, with 7 refs., on the hormonal contraception in males by
suppressing FSH, LH, and intratesticular testosterone and a simultaneous
substitution of extratesticular testosterone. A combined administration
of gonadorelin antagonist cetrorelix with 19
-nortestosterone induces a complex a complete azospermia without side
effects.

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ANSWER 5 OF 15 HCAPLUS COPYRIGHT 2001 ACS 1992:605942 HCAPLUS
L43
AN
DN
           117:205942
            Peptide analogs as LH-RH antagonists
TI
           Xiao, Shaobo
Asta Medica Aktiengesellschaft, Germany
IN
PA
           PCT Int. Appl., 46 pp. CODEN: PIXXD2
SO
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            Patent
           English
LA
FAN. CNT 2
           PATENT NO.
                                                   KIND DATE
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ΡI
           wo 9208733
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                                                                 19920529
                                                                                                     WO 1991-EP2110
                                                                                                                                             19911108
           W: AU, CA, CS, FI, HU, JP, KR, NO, PL, SU
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE
CA 2095932

AA 19920511

CA 1991-2095932 19901108
            CN 1061605
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           CN 1036343
ZA 9108847
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           AU 9188612
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           AU 662496
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           ΕP
                  564466
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           EP 564466
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                           AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE
66 A2 19950928 HU 1993-1353 19911108
664 B1 19961231 PL 1991-295427 19911108
620 E 19970315 AT 1991-919435 19911108
                    R:
           HU 70166
           PL 170564
AT 149520
           ES 2100965
CZ 284168
RU 2123499
LV 10106
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LT 1993-1513
           NO 9301697
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           LT 3971
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                                                                                                                                             19931203
                                                     В
PRAI CN 1990-108955
                                                   19901110
           N 1991-EP2110 19911108
WA 1991-EP2110 19911108
MARPAT 117:205942
The known LH-RH antagonist
OS
          The known LH-RH antagonist N-acetyl-D-.beta.-(2-naphthyl)alanyl-p-chloro-D-phenylalanyl-D-.beta.-(3-pyridyl)alanyl-seryl-tyrosyl-arginyl-leucyl-arginyl-prolyl-D-alaninamide is modified in both alk. and lipophilic regions based on its topol. similarity to substance P to obtain new LH-RH antagonists having both high antiovulatory activity and low histamine-releasing activity. These compds. may be used as male and female contraceptives or to treat reproductive endocrinol. disorders including endometriosis, precocious puberty in children, prostate cancer, breast cancer, and infertility. Thus, N-acetyl-D-.beta.-(2-naphthyl)alanyl-p-chloro-D-phenylalanyl-D-.beta.-(3-pyridyl)alanyl-seryl-arginyl-D-.beta.-(3-pyridyl)alanyl-leucyl-arginyl-prolyl-D-alaninamide showed an ID60 of 0.12 .mu.g for antiovulatory activity in rats in vivo and an EC50 of 3.5 .mu.g/mL for histamine-releasing activity on rat peritoneal leukocytes (5-10% mast cells) in vitro.
AR
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- ANSWER 6 OF 15 HCAPLUS COPYRIGHT 2001 ACS L43
- 1992:463186 HCAPLUS 117:63186
- DN
- Differential response of testis and serum gonadotropins to testosterone in rats treated with a gonadotropin releasing hormone antagonist or 17.beta.-estradiol
- Ganguly, A.; Misro, M. M.; Chaudhury, J.; Majumdar, S. S.; Majumdar, U. K.; Das, R. P. ΑU
- Dep. Reprod. Biomed., Natl. Inst. Health Family Welfare, New Delhi, CS
- 110067, India Indian J. Exp. Biol. (1992), 30 CODEN: IJEBA6; ISSN: 0019-5189 30(7), 567-73
- DT Journal
- English Adult rats treated with a gonadotropin-releasing hormone (GnRH) antagonist (AC D2Nall, D4cl Phe2, DTrp3, DArg6, DAla10 GnRH; code: 103-289-10, National Institutes of Health, USA) for 5 wk (250 .mu.g/kg) showed multiple degrees of impairment and atrophy of the genital organs concomitant with decreased serum levels of testosterone, LH and FSH. Inhibition of spermatogenesis was characterized by germ cell degeneration and overall decline in different cell not and in particular communication. Inhibition of spermatogenesis was characterized by germ cell degeneration and overall decline in different cell nos. and in particular, spermatids of any kind were completely absent. Testosterone supplementation (60 .mu.g/rat/day, s.c.) to GnRH antagonist-treated rats, for the same period, significantly elevated the wts. of the sex organs, and the serum levels of hormones. Spermatogenesis was improved both qual. and quant.; albeit failed to be restored back to control levels. Treatment with 17.beta.-estradiol (1 .mu.g/rat/day) for 5 wk had insignificant effect on spermatogenesis but the wts. of the genital organs (seminal vesicles by 19% and ventral prostate by 40%) and the levels of serum hormones (LH by 24%, FSH 22%, and testosterone by 25%) were otherwise reduced. Administration of testosterone either alone or in combination with 17.beta.-estradiol had only a marginal effect on spermatogenesis or on other reproductive parameters. The results indicate a pos. shift in the response of the testis and serum levels of gonadotropins to testosterone supplementation in rats treated with either GnRH antagonist or 17.beta.-estradiol. 17.beta.-estradiol.

- ANSWER 7 OF 15 HCAPLUS COPYRIGHT 2001 ACS
- 1991:841 HCAPLUS
- 114:841 DN
- Gonadotropin-releasing hormone (GnRH) agonists and GnRH antagonists do not alter endogenous GnRH secretion in short-term castrated rams Caraty, Alain; Locatelli, Alain; Delaleu, Bernadette; Spitz, Irving M.; Schatz, Bernard; Bouchard, Philippe Stn. Physiol. Reprod., Inst. Natl. Rech. Agron., Nouzilly, 37380, Fr. Endocrinology (Baltimore) (1990), 127(5), 2523-9 CODEN: ENDOAO; ISSN: 0013-7227
- ΑU
- SO
- DT Journal
- English
 To det. if GnRH analogs act on GnRH secretion through a short or
 ultrashort loop feedback mechanism, expts. were performed to analyze GnRH
 secretion in hypophyseal portal blood of conscious short-term castrated
 rams under both agonist or antagonist treatment. In Study 1, rams were
 castrated and surgically prepd. for portal blood collection on day -7.
 Portal and peripheral blood were collected simultaneously every 10 min for
 14-15 hon day 0. Five h after the beginning of the portal blood
 collection, animals were injected i.m. with 5 mg potent GnRH antagonist
 (Nal-Glu). In Study 2, rams were treated daily from day -11 to day 0 with
 the GnRH agonist D-Trp6 GnRH (0.5 mg i.m.). Castration and surgical
 prepn. for portal blood collection were performed on day -7. On day 0
 portal and peripheral blood were collected simultaneously every 10 min for
 10-11 h. In both studies, to det. whether an increase
 in GnRH concn. in hypophyseal portal blood can overcome the inhibitory
 effect of the GnRH analogs, between 5 and 5.5 h after the injection of the
 analogs, endogenous GnRH secretion was stimulated by naloxone
 administration (3 .times. 100 mg, i.v., at 30-min intervals) followed by a
 bolus of exogenous GnRH (2 .times. 10 .mu.g, i.v., at 30-min intervals).
 In study 1, Nal-Glu administration led to a rapid cessation of pulsatile
 LH secretion for the duration of blood collection, whereas GnRH pulse
 frequency and amplitude were not affected. GnRH and LH pulse frequency
 before and after Nal-Glu administration were, 6.2 vs. 5.7 and 5.3 vs. 0.3
 pulses/6 h, resp. In Study 2, peripheral LH secretion was completely
 suppressed, whereas GnRH secretion (portal blood) remained pulsatile.
 GnRH pulses frequency and pulse amplitude were 4.3 pulses/6 h and 43.0 7
 pg/mL, resp. In both expts., neither stimulation of endogenous GnRH
 secretion by naloxone nor administration of exogenous GnRH allowed
 reinitiation of LH secretion. However, addnl. studies in animals of each
 treatment group (study III) showed that this was clearly a dose-relat English To det. if GnRH analogs act on GnRH secretion through a short or GNRH antagonist administration affect endogenous GNRH secretion either directly by an action on GNRH neurons or indirectly by a decrease in LH secretion. These results, therefore, do not support a role for both a short loop and ultrashort loop feedback mechanism in castrated rams.

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ANSWER 8 OF 15 HCAPLUS COPYRIGHT 2001 ACS 1989:534639 HCAPLUS
L43
ΔN
         111:134639
17A(.beta.)-Hydroxy-7(.alpha.)-methyl-D-homo-19
-norandrosta-4,16-dien-3-one and its 17-esters with androgenic and gonadotropic/antigonadotropic activities, their pharmaceutical (e.g., male
DN
TI
        gonauditopic/antigonadotropic activities, their pharmaceutical (e.g., male contracteptive) compostions, and their uses
Tanabe, Masato; Crowe, David F.; Detre, George; Peters, Richard H.; Avery, Mitchell A. G.
SRI International, USA
U.S., 17 pp. Cont.-in-part of U.S. Ser. No. 612,415, abandoned.
CODEN: USXXAM
IN
PΔ
DT
         Patent
         English
FAN.CNT 2
         PATENT NO.
                                          KIND DATE
                                                                                   APPLICATION NO.
                                                                                                                   DATE
                                                     19881129
                                                                                   US 1986-856386
                                                                                                                    19860428
PΤ
         US 4788218
                                                     19860604
                                                                                   EP 1985-902235
                                                                                                                    19850408
         EP 182808
                                            Α1
R: AT, BE, CH, DE, FR, GB, IT, LI, NL, SE
NO 8600177 A 19860120 NO 1986-1
PRAI US 1984-612415 19840521
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         MARPAT 111:134639
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AB Title steroids I [R1 = H, COR2; R2 = C1-24 alkyl, C2-24 alkenyl or alkynyl, C3-8 cycloalkyl, C4-32 cycloalkylalkyl, C1-24 haloalkyl, Ph or naphthyl with optional halo and up to 4 C1-6 alkyl substituents, aralkyl where aryl is Ph or naphthyl (having up to 4 C1-6 alkyl) and where alkyl moiety is C1-6], having androgenic and dose-related gonadotropic/antigonadotropic activity, were prepd. 7.alpha.—Methylestrone was subjected to a sequence of O-methylation, conversion to the silylated 17-cyanohydrin with Me3SiCN and ZnI2, redn. with LialH4 to the 17-hydroxy-17-aminomethyl compds., Tiffeneau-Demjanov ring expansion of the latter to the 17a-keto-D-homo steroid, introduction of .DELTA.16 with PhSeCl/H2O2, redn. of keto to 17a.beta.-OH by LialH4, Li-NH3 redn. of the A-ring, hydrolysis with HCl, and acylation by (EtCO)20 to give I (R = COEt) (II). The oral and s.c. androgenic potencies of II in the Hershberger test were 5- and 40-fold those of 17.alpha.—methyltestosterone.

L43 ANSWER 10 OF 15 HCAPLUS COPYRIGHT 2001 ACS 1988:486539 HCAPLUS DN 109:86539 Induction of luteal regression in the marmoset monkey (Callithrix jacchus) TI by a gonadotropin-releasing hormone antagonist and the effects on subsequent follicular development ΑU Hodges, J. K.; Green, D. I.; Cottingham, P. G.; Sauer, M. J.; Edwards, C.; Lightman, S. L.
Inst. Zool., Zool. Soc. London, London, NW1 4RY, UK
J. Reprod. Fertil. (1988), 82(2), 743-52
CODEN: JRPFA4; ISSN: 0022-4251 SO DT Journal English LA Doses of 100 or 200 .mu.g of a novel gonadotropin-releasing hormone (GnRH) antagonist ([N-acetyl-D.beta.Na11-D-pCl-Phe2-D-Phe3-D-Arg6-Phe7-Arg8-D-Ala10]NH2 GnRH) were administered on days 10/11 of the ΔR luteal phase and induced a marked suppression of circulating bioactive LH and progesterone concns. within 1 day of treatment. Thereafter, and progesterone concns. within 1 day of treatment. Thereafter, progesterone concns. remained low or undetectable until after the next ovulation. Similar results were obtained when 200 .mu.g antagonist were given on days 5/6 of the luteal phase. The interval from injection of antagonist (200 .mu.g but not 100 .mu.g) to ovulation (based on a rise in progesterone >10 ng/mL) was longer than that from prostaglandin-induced luteal regression to ovulation in control cycles (range, 13-15 days after antagonist vs. 8-10 days after prostaglandin). This delay of 4-5 days was equiv. to the duration for which LH concns. were suppressed by 200 .mu.g antagonist when administered to ovariectomized animals. Corpus luteum function during the cycle after GnRH antagonist treatment appeared normal according to the pattern of circulating progesterone. Thus, corpus luteum function and preovulatory follicular development in the marmoset monkey are dependent on pituitary gonadotropin secretion.

are dependent on pituitary gonadotropin secretion.

gonadotrophs.

ANSWER 11 OF 15 HCAPLUS COPYRIGHT 2001 ACS 1988:161751 HCAPLUS DN 108:161751 Opiate-induced hypersensitivity to testosterone feedback: pituitary involvement Kalra, Pushpa S.; Sahu, Abhiram; Kalra, Satya P.
Coll. Med., Univ. Florida, Gainesville, FL, 32610, USA
Endocrinology (Baltimore) (1988), 122(3), 997-1003
CODEN: ENDOAO; ISSN: 0013-7227 DT Journal LA English
The mode of action of morphine (M) to increase the sensitivity of
castrated male rats to the inhibitory feedback action of testosterone (T)
on LH release was examd. In castrated rats, s.c. implantation of M
pellets or 5-mm long T-filled capsules (T5) failed to suppress LH release,
but a combination of M and T5 drastically decreased serum LH levels.
Likewise, while treatment with a higher dose of T (30-mm long implant,
s.c.) suppressed LH release, combined treatment with M and T30 produced a
further suppression of LH levels. The in vitro release rate of LH-RH from
the medial basal hypothalamus-preoptic area of castrated rats treated with
M and/(or) T as well as the in vivo pituitary LH response to LH-RH
challenge in similarly treated rats were also examd. Interestingly, the
in vitro basal and naloxone-induced LH-RH release from the medial basal
hypothalamus-preoptic area of the 6 groups of rats was similar, regardless English hypothalamus-preoptic area of the 6 groups of rats was similar, regardless of whether LH levels were in the high castrate or low basal range. On the of whether LH levels were in the high castrate or low basal range. On the other hand, M treatment greatly attenuated LH release in vivo in response to LH-RH challenge (10-11-10-12 M) in T-treated rats. In fact, LH increments in response to 1 .times. 10-12 M LH-RH, seen in control, T5, and T30 groups, were abolished by addnl. M treatment of T-treated rats. This in vitro assessment of LH-RH release suggests that the drastic decrease in LH release in (T plus M)-treated rats may not be due to impaired LH-RH release, but, rather, be due in part to reduced pituitary responsiveness to intermittent endogenous LH-RH signals. The reduced pituitary responsiveness to LH-RH in (T plus M)-treated rats may be a consequence of either a direct pituitary effect of opiates in conjunction with T or augmented action of hypothalamic neurohumoral agents which may inhibit LH release on their own or antagonize the LH-releasing action of LH-RH at the level of pituitary gonadotrophs.

HUI 09/666,146

=> d bib abs hitrn 12

L43 ANSWER 12 OF 15 HCAPLUS COPYRIGHT 2001 ACS
AN 1987:490031 HCAPLUS
107:90031
TI LH-RH analogs and steroids for male fertility regulation
AU Nieschlag, E.; Weinbauer, G. F.; Knuth, U. A.
Dep. Reprod. Med., Univ. Muenster, Muenster, D-440, Fed. Rep. Ger.
SO Serono Symp. Publ. Raven Press (1987), 36(Fertil. Regul. Today Tomorrow), 233-46
CODEN: SPRPDU; ISSN: 0733-897X
DT Journal; General Review
LA English
A review, with 40 refs., on the use of steroids (testosterone, 19
-nortestosterone, cyproterone acetate, testosterone-progestogen mixts., and danazol and testosterone) and LH-RH agonists and antagonists as male contraceptive agents.

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ANSWER 13 OF 15 HCAPLUS COPYRIGHT 2001 ACS 1987:433198 HCAPLUS
AN
      107:33198
DN
      Preparation and use of indolobenzodiazepines for antagonizing luteinizing
      hormone releasing hormone
      Ho, Chih Yung
      McNeilab, Inc., USA
Eur. Pat. Appl., 12 pp.
PA
      CODEN: EPXXDW
      Patent
     English
LA
FAN.CNT 2
      PATENT NO.
                           KIND DATE
                                                      APPLICATION NO.
     EP 219292
                            A2
                                   19870422
                                                      EP 1986-307693
                                                                            19861006
      R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE
US 4678784 A 19870707 US 1985-784963
DK 8604771 A 19870408 DK 1986-4771
                                                                            19851007
                                                                            19861006
                                   19870409
      AU 8663623
                                                      AU 1986-63623
                                                                            19861007
JP 62116514
PRAI US 1985-784963
US 1984-599095
                                   19870528
                                                      JP 1986-237280
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                           19851007
                            19840411
      US 1985-721723
                           19850410
GΙ
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$$R^{2}$$
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AB Fused tetracyclic benzodiazepines I (R1 = acyclic or cyclic amine; R2 = H, alkoxy, alkyl, CF3, halogen, NO2, OH, dialkylamino) are prepd. for use as antagonists of LH-RH. 12-(4-Methyl-1-piperazinyl)-6H-indolo[2,1-c][1,4]benzodiazepine (II) was prepd. from NaH-treated Et 2-indolecarboxylate and 2-nitrobenzyl chloride in 4 steps. II, given orally at 0.5 mg/kg body wt. on each of the 3 days prior to expected ovulation, inhibited ovulation in rats; given orally at 50 mg/kg for the 1st 13 days of pregnancy, II prevented implantation in 3 of 5 treated mice.

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L43 ANSWER 14 OF 15 HCAPLUS COPYRIGHT 2001 ACS
                      1987:96973 HCAPLUS
                     106:96973
                     Contraception in dogs with luteinizing hormone releasing hormone
                      antagonists
                    Vickery, Brian H.
Syntex (U.S.A.), Inc., USA
Eur. Pat. Appl., 19 pp.
                     CODEN: EPXXDW
 DT
                    Patent
                    English
 FAN.CNT 1
PI EP 199302 A2 19861029 EP 1986-105372
R: AT, BE, CH, DE, FR, GB, IT, LI, LU, NL, SE
AU 8656388 A1 19861023 AU 1986-56388
PRAI US 1985-725267 19850419
AB Contraception in formal
                                                                                                                                                                             APPLICATION NO. DATE
                                                                                                                                                                           EP 1986-105372
                                                                                                                                                                                                                                                  19860418
                                                                                                                                                                                                                                                  19860418
                 AU 803080 AI 19801023 AU 1900-30300 19000410 US 1985-725267 19850419

Contraception in female dogs comprises administering an LH-RH antagonist either during estrus or during pregnancy for a time sufficient to terminate either estrus or pregnancy. Thus, a bitch was bled and plasma progesterone (I) measured in nanograms/mL vs. the day of diestrus. On day -8 and -4 the plasma I was 4-6 ng/mL, at day 1 it was 30 ng/mL, it peaked at 60 ng/mL on day 9, and slowly decreased to 30 ng/mL on day 25. At day 25 the animal was given a daily s.c. injection of [N-Ac-D-Na1(2), 1 D-p-Cl-Phe2, D-Trp3, D-Deh6, D-Ala10]LH-RH [D-Na1(2) = 3-(2-naphthyl)-D-alanyl; D-p-Cl-Ph = 3-(p-chlorophenyl)-D-alanyl; D-Deh = NG,NG-diethyl-D-homoarginine] for 7 days. After the 1st injection the plasma I dropped to 4 ng/mL, at the of the treatment the plasma I level was <1 ng/mL, and a fetus was expelled the 5th day of treatment with tissue mass expelled on day 49 which was 24 days after the start of treatment. A s.c. injectable soln. was formulated contg. LH-RH antagonist 10.0, benzyl alc. 9.0, AcOH 1.2, propylene glycol 200.0 and mannitol 35.0 mg, sterile H2O 1.0 mL.
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L43 ANSWER 15 OF 15 HCAPLUS COPYRIGHT 2001 ACS
AN 1983:482365 HCAPLUS
DN 99:82365
TI Inhibitory effect of a new opioid agonist on reproductive endocrine activity in rats of both sexes
AU Marko, M.; Roemer, D.
CS Preclin. Res. Dep., Sandoz Ltd., Basel, CH-4002, Switz.
SO Life Sci. (1983), 33(3), 233-40
CODEN: LIFSAK; ISSN: 0024-3205
DT Journal
LA English
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AB Acute administration of bremazocine (I) [75684-07-0] (0.005-1 mg/kg, s.c.) or of morphine (10-20 mg/kg, s.c.) diminished serum LH [9002-67-9] levels and spontaneous ovulation in female rats in a dose-dependent manner. Chronic treatment with bremazocine significantly diminished LH and testosterone [58-22-0] secretions in male rats which in turn led to a fall in wt. of the prostate gland; prolactin [9002-62-4] and FSH [9002-68-0] secretions were not influenced significantly. The .mu.-antagonist naloxone, which increases LH release in rats, in acute expts. significantly antagonized the inhibiting effect of morphine, but not that of bremazocine, on LH secretion. Neither the basal nor the LHRH-stimulated secretion of LH in pituitary cell cultures were changed by bremazocine (10-11 to 10-5 M); however, the release of LHRH-like activity from hypothalamic fragments was significantly impaired by 10-7 M bremazocine. Thus, bremazocine is a new non-morphine-like opioid agonist which selectively inhibits LH release in rats.

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©L45 ANSWER 10 OF 10 HCAPLUS COPYRIGHT 2001 ACS AN 1997:543582 HCAPLUS DN 127:140580
              Combination of LH-RH analogs and antiestrogens for treatment of
 TI
               gynecological disorders
             Stoeckemann, Klaus; Muhn, Peter
Schering A.-G., Germany
Ger. Offen., S pp.
CODEN: GWXXBX
 TN
 PA
 SO
 DT
              Patent
              German
 ΙA
 FAN. CNT 1
              PATENT NO.
                                                         KIND DATE
                                                                                                              APPLICATION NO. DATE
              DE 19604231
                                                          A1
                                                                         19970731
                                                                                                              DE 1996-19604231 19960129
 PΤ
                                                                        19970807
                                                                                                              WO 1997-EP395
                                                                                                                                                         19970129
              wo 9727863
                                                           A1
                       9/2/863 Al 1997080/ WO 1997-EP395 19970129
W: AL, AM, AU, AZ, BB, BG, BR, BY, CA, CN, CZ, EE, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, RO, RU, SD, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG

9715969
A1 19970822
AU 1997-15969
19970129
877621
A1 19981118
ED 1997-258
                                                                                                              AU 1997-15969
EP 1997-902258
               AU 9715969
              EP 877621
                                                                       19981118
                                                                                                                                                         19970129
                                                            Α1
                        R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO L209750 A 19990303 CN 1997-191940 19970129
               CN 1209750
                                                                                                              BR 1997-7210
JP 1997-527295
               BR 9707210
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               JP 2000505422
                                                            T2
                                                                        20000509
                                                                                                                                                          19980728
 PRAI DE 1996-19604231 19960129
WO 1997-EP395 19970129
               NO 9803465
                                                                        19980918
                                                                                                              NO 1998-3465
             WO 1997-EP395 19970129
Combinations of LH-RH analogs and antiestrogens with tissue-selective estrogenic activity are useful for treatment of gynecol. disorders, esp. endometriosis and myomas. Thus, in rats with i.p. implants of endometrium as a model of endometriosis, the LH-RH antagonist antide (0.5 mg s.c. every 3 days for 4 wk) produced complete regression of cystic foci of endometriosis, but simultaneously to a redn. in endogenous estrogen level resembling that occurring after ovariectomy, with a decrease in bone d. and an increase in osteoclast activity. When the antiestrogen raloxifen (3 mg/day orally) was also administered during the period of antide administration, the endometriosis regressed but no decrease in estrogen
               administration, the endometriosis regressed but no decrease in estrogen
               level occurred.
               112568-12-4, Antide 120287-85-6,
               Cetrorelix
               RL: BAC (Biological activity or effector, except adverse); THU (Therapeutic use); BIOL (Biological study); USES (Uses) (combination of LH-RH analogs and antiestrogens for treatment of
              gynecol. disorders)
112568-12-4 HCAPLUS
              D-Alaninamide, N-acetyl-3-(2-naphthalenyl)-D-alanyl-4-chloro-D-phenylalanyl-3-(3-pyridinyl)-D-alanyl-L-seryl-N6-(3-pyridinylcarbonyl)-L-lysyl-N6-(3-pyridinylcarbonyl)-L-lysyl-L-leucyl-N6-(1-methylethyl)-L-lysyl-L-prolyl- (9CI) (CA INDEX NAME)
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Absolute stereochemistry.

PAGE 1-B

120287-85-6 HCAPLUS
D-Alaninamide, N-acetyl-3-(2-naphthalenyl)-D-alanyl-4-chloro-Dphenylalanyl-3-(3-pyridinyl)-D-alanyl-L-seryl-L-tyrosyl-N5-(aminocarbonyl)D-ornithyl-L-leucyl-L-arginyl-L-prolyl- (9CI) (CA INDEX NAME) RN CN

Absolute stereochemistry.

PAGE 1-A

PAGE 1-B